

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SAMSUNG ELECTRONICS CO., LTD.;  
MICRON TECHNOLOGY, INC.; and  
SK HYNIX, INC.  
Petitioner

v.

ELM 3DS INNOVATIONS, LLC  
Patent Owner

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Patent No. 8,841,778

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**DECLARATION OF DR. PAUL D. FRANZON  
IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF  
U.S. PATENT NO. 8,841,778**

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I, Paul D. Franzon, declare as follows:

## **I. INTRODUCTION**

1. I have been retained by Samsung Electronics Co., Ltd.; Micron Technology, Inc.; and SK hynix, Inc. (collectively, “Petitioner”) as an independent expert consultant in this proceeding before the United States Patent and Trademark Office (“PTO”).

2. I have been asked to consider whether certain references teach or suggest the features recited in claims 1, 2, 8, 14, 31, 32, 44, 46, 52, 53, and 54 of U.S. Patent No. 8,841,778 (“the ’778 patent”) (Ex. 1001), which I understand is allegedly owned by Elm 3DS Innovations, LLC (“Patent Owner”). My opinions and the bases for my opinions are set forth below.

3. I am being compensated at my ordinary and customary consulting rate for my work.

4. My compensation is in no way contingent on the nature of my findings, the presentation of my findings in testimony, or the outcome of this or any other proceeding. I have no other interest in this proceeding.

## **II. QUALIFICATIONS**

5. I am a currently a Distinguished Professor in the Department of Electrical and Computer Engineering at North Carolina State University (“NCSU”) in Raleigh, North Carolina. I have been affiliated with NCSU in various roles since

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